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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,220	03/04/2004	Junichi Nakamikawa	Q80026	4193

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EXAMINER

KAYRISH, MATTHEW

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/792,220		NAKAMIKAWA, JUNICHI	
	Examiner		Art Unit	
	Matthew G. Kayrish		2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meguro (US Patent Number 6515830), in view of Hashimoto (US Patent Number 6298034).
3. Regarding claim 1, Meguro et al disclose:

A disk cartridge comprising:

A disk-shaped information recording medium having a center core centrally attached thereto (figure 8, item 11);

A flat housing, which has upper (figure 8, item 21) and lower shells (figure 8, item 22) and rotatably accommodates therein the disk-shaped information recording medium (figure 8, item 5);

The housing including an opening to allow a recording/reproducing head of a disk drive to access a surface of the information recording disk (column 8, lines 6-10),

Wherein the upper shutter member comprises:

A recess defining member (figure 8, item 27) which is provided on an outer region radially outward from a region above the center core in the surface thereof on the side opposed to and facing the information recording medium so as to define a recess in the region above the center core (See figure 8); and

An upper liner (figure 8, item 101), which is placed on the recess defining member and serves to wipe off dirt and dust deposited on the information recording medium (column 12, lines 19-37).

Meguro fails to disclose:

A rotary shutter for opening and closing the opening; and

The rotary shutter being constituted by an upper shutter member which is rotatably supported by the upper shell and a lower shutter member which is rotatably supported by the lower shell,

Hashimoto discloses:

A rotary shutter for opening and closing the opening (column 2, lines 23-32); and

The rotary shutter being constituted by an upper shutter member which is rotatably supported by the upper shell and a lower shutter member which is rotatably supported by the lower shell (column 2, lines 23-32),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Meguro's shutters with the rotary shutters of Hashimoto, since rotary shutters have the advantage of rotating the shutters to open the window to the disk, compared to sliding the shutter to open the window. Rotary shutters are unbiased, therefore will not resisted staying in position when opened, whereas, slide shutters are biased in the closed position.

4. Regarding claim 2, Meguro discloses:

A disk cartridge according to claim 1, wherein the recess defining member is made up of adhesive for affixing the upper liner to the upper shutter member (columns 10 & 11, lines 65-67 & 1-4).

5. Regarding claim 3, Meguro discloses:

A disk cartridge according to claim 1, wherein the recess defining member is formed integrally (figure 22, item 105 is integral with upper shell 21) with the upper liner using the same material as the upper liner (column 10, lines 65-67).

6. Regarding claim 4, Meguro discloses:

A disk cartridge according to claim 1, wherein a lower liner is provided on the surface of the lower shell on the side facing the information recording medium (figure 8, item 102), and the recess defining member has a thickness selected such that the both surfaces of the information recording medium are subjected to substantially the same pressure respectively from the upper and lower liners when the disk drive is loaded (See figure 8, liners are same distance from medium).

7. Regarding claim 5, Meguro discloses everything repeated from claim 1, further disclosing:

Wherein the upper shutter member (figure 22, item 21) has a step portion (figure 22, bent portion) between a region above the center core (figure 22, item 28), which is included in a surface thereof facing the information recording medium, and an outer region which is located radially outward from the region above the center core, in order to define a recess in the region above the center core (See figure 8); and

Wherein the step portion serves to produce a height difference such that the distance from the information recording medium to the lower shutter member and the

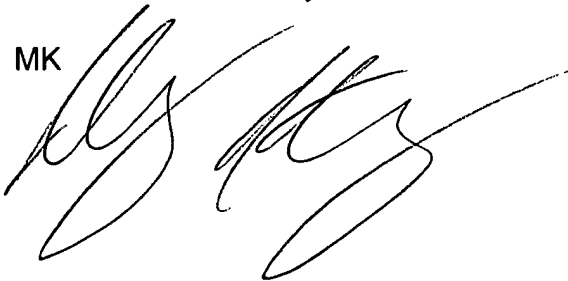
distance from the information recording medium to the opposite surface in the outer region become substantially the same when the disk cartridge is loaded in the disk drive (See figure 8, same distances between on both sides of disc).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Greco Kayrish

4/19/2006

MK



4/19/2006


ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER